

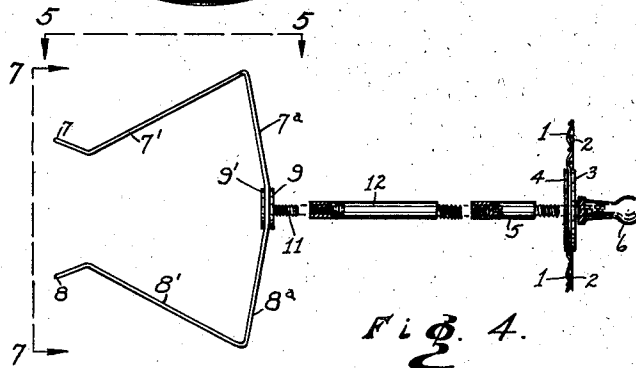
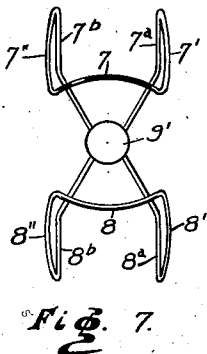
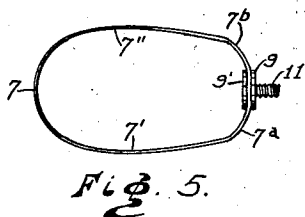
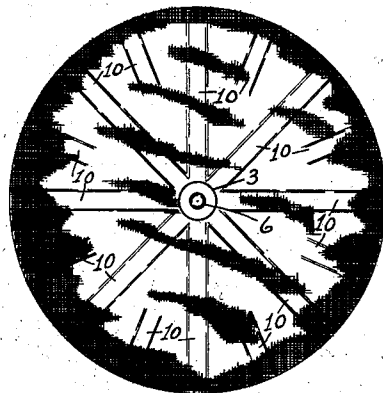
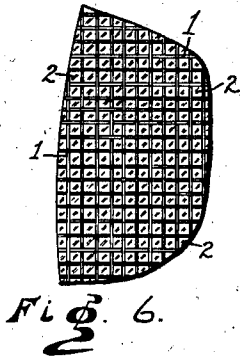
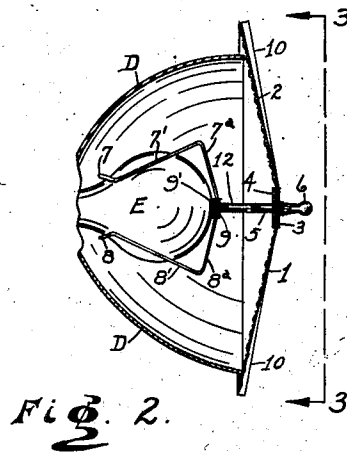
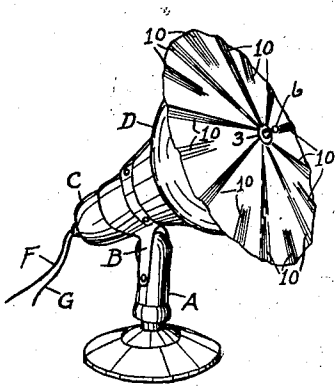
Feb. 5, 1935.

R. E. JONES ET AL

1,990,287

COLOR PROJECTING ATTACHMENT FOR ELECTRIC LIGHTS

Filed April 5, 1933



Inventors;
RAYMOND E. JONES
and DWIGHT A. ELLIOT:
Robert W. Faudle
Attorney.

UNITED STATES PATENT OFFICE

1,990,287

COLOR PROJECTING ATTACHMENT FOR
ELECTRIC LIGHTSRaymond E. Jones and Dwight A. Elliott,
Richmond, Ind.

Application April 5, 1933, Serial No. 664,588

2 Claims. (Cl. 240—3.1)

Our present invention relates to the refraction and dispersion of iridescent rays or gleams of electric light, so projected and chromatically treated that the colorature of the emanating light will be completely transformed, in order to produce a delectable appearance to the projected light, and to the subject upon which the rays of light are directed.

Specifically stated, our object is to provide a colortone device for attachment to an ordinary reflector, having an electric-light bulb therein and having means for illuminating the bulb in the usual manner, with our invention attached to said reflector whereby it appears as an integral part thereof, and having means whereby the projected light passing therethrough will be directed flaringly over a large surface at a distance therefrom, with the rays of light formed in a desired color and broken up into innumeral rays, in order to give a new and pleasing effect thereto.

More specifically stated, our object is to provide an attachment for artificial-light reflectors, especially adapted to be employed for advertising and decorative purposes, particularly in connection with window displays, whereby the goods displayed will be given a super-attractive appearance, and will attract attention thereto.

The means for carrying out the principles of our invention in a practical, efficient, economical, and attractive manner, is shown in the accompanying drawing, in which—Figure 1 is a perspective view of our construction, showing its connection with the supporting elements employed therewith.

Figure 2 is a direct side elevation of our invention, showing the manner in which it may be attached in operative condition.

Figure 3 is a detail front elevation of our invention alone, as taken from the line 3—3 of Fig. 2.

Figure 4 is a side elevation of the attaching means alone, the same forming a minor portion of our invention.

Figure 5 is a detail plan view of one of the spring clamping members alone, as taken from the line 5—5 of Fig. 4. Figure 6 is a detail view showing a fragment of the light percolator, as taken on an exaggerated scale. And Figure 7 is a front elevation of the bulb embracing means, as taken from the line 7—7 of Fig. 4.

Similar indices designate like parts throughout the several views.

In order to make clear the utilization of our invention, we will first describe one form of means with which our invention may be associated, but

it is to be understood that our invention is not to be limited to any particular type of reflector, or to the particular means for the support or the positioning thereof.

In this instance we have shown a supporting device, comprising the pedestal A, to which is adjustably attached the clamp B, which carries the electric-light socket C. Also connected to the clamp B is the outwardly extending and flaring reflector D, which should be formed contorted in shape, for the purpose of diffusing or disseminating the rays of light reflected by the inner concave surface thereof and directed outwardly thereby at various angles in order to obtain a more pleasing effect, and a higher degree of artistry, with relation to the lighting effect produced.

Located within the reflector D is an electric-light bulb E, whose stem is detachably secured in the forward end of the socket C, in the usual manner. And an electric circuit will be provided, through the wires F and G, for the purpose of illuminating said bulb.

The new and predominant features of our invention reside in the concavo-convex conical light-percolator, which has as its base, or supporting element, a foraminated material, such as a fine-mesh disc screen 1, whose outer peripheral portion is adapted to contact resiliently with the periphery of the reflector D, with the convex face thereof directed outwardly, that is forwardly with relation to the travel of the light directed by the reflector. Said wire screen 1, is covered with, and the interstices thereof are closed, by a colored semi-transparent, or translucent, or other colorific material 2, such for instance, a flexible glass, or cello, which not only covers the strands of wire forming the screen, but permeates and spans the interstices of the screen 1, as shown in Fig. 6. And, preferably, it is applied in liquid condition, which soon solidifies to a semi-flexible condition. It is apparent that by reason of the semi-fluid material 2, when applied to the screen will, as it solidifies, naturally become formed in the nature of arcuately-shaped cavities or double concave indentations on each of the surfaces in the interstices formed by the screen which, when the invention is in use, will cause the light passing through the interstices to be broken up into innumeral minor rays of colored light and then transmitted therefrom and produce a most beautiful light effect, both when one is looking at the screen, or in the opposite direction where the light is directed upon an object remote therefrom. It is contemplated that

each particular disc shall have its own particular color throughout its extent, but in some instances two or more colors may be employed in connection with a single disc. Said disc is
5 formed with radiating arcuate shaped indentations on the rear side, which of course forms like but reversed ridges on its forward side, as indicated by numeral 10 in Fig. 3.

Means for mounting said disc in operative
10 condition, in connection with said reflector, consists of the following: Formed through the center, or peak, of the light-percolator is an aperture, which is surrounded by the respective washers 3 and 4, which are rigidly secured to the light
15 percolating disc in any desired manner, but preferably by means of an eyelet (not shown). Numeral 5 denotes the main coupling member, which is formed with a reduced threaded forward end position, and a threaded socket formed in its
20 rear portion.

Said reduced threaded portion of the coupling 5 fits said aperture in the light-percolator, and it extends through the apertures in said washers 3 and 4, with its shoulder contacting with the
25 washer 4.

Numeral 6 denotes the knob member, which has a threaded socket in the rear end of the stem portion thereof, which is adapted to run on the reduced threaded portion of the coupling 5 and
30 contact with the shoulders thereof, whereby the coupling 5 and the light percolator disc are rigidly secured together, as shown in Fig. 2.

Spring wire, or its equivalent, is employed in the construction of the means for removably securing the disc into connection with the reflector D, and this means comprises two arcuately shaped
35 embracements 7 and 8, which correspond with the radial contour of the bulb E. The outwardly flaring apart arms, 7' and 7'', are formed by continuations from the member 7; and likewise the
40 outwardly flaring apart arms 8' and 8'' are formed by the continuations from the ends of the member 8. Turned inwardly at an acute angle from the forward end portions of the arms
45 7' and 7'' are the respective fingers 7^a and 7^b; and likewise turned inwardly at an acute angle from the forward end portions of the arms 8' and 8'' are the respective fingers 8^a and 8^b. All four of said fingers are turned inward convergently,
50 and meet at a common point parallel with the axis of the bulb E, where the four ends are autogenously secured together with the discs 9 and 9', in conjunction with the forwardly projecting threaded stem 11. The normal shape of said
55 embracement members, together with their arms, are such that the curved rear portions of said embracements, which contact with the bulb E, have to be sprung apart to permit the bulb E to be embraced thereby, as shown in Fig. 2; and

when released will retain the light-percolator in operative position. Said stem 11 extends into the socket of the coupling 5, or in some instances an extension coupling 12 may be employed, which
5 latter is longer than the coupling 5, and the stem 11 may be inserted in the socket of the knob 6, or other combinations may be employed in order to properly position the embracement in relation to the bulb. Said indentations and ridges
10 are for the purpose of further refracting the rays of light as it passes through the percolator disc, and also for supporting and stiffening the percolator-disc.

From the above it will be apparent that the construction shown herein will be capable of ob-
15 taining the colorific and other objects herein set forth, and of carrying out the features herein enumerated, in a practical and economical manner, and with the attainment of a high degree of artistry.

Having now fully shown and described our invention, what we claim and desire to secure by Letters Patent of the United States, is—

1. A light coloring and diffusing attachment
25 for electric light reflectors comprising a conical-shaped translucent cover having a hole in its center, a plurality of threaded couplings adapted to be threaded together and forming a continuous shaft, a knob member adapted to be threaded
30 onto the threaded portion of one of the couplings, a wire clamping member having a projecting threaded stem which is adapted to be threaded into an end of one of said couplings, said conical-shaped translucent cover being adapted to be
35 securely clamped between the knob member and one of said couplings, said wire clamping member being adapted to clamp resiliently to an electric light bulb, and said conical-shaped translucent cover being adapted to rest resiliently on
40 the outwardly projecting edge of the light reflector, all substantially as shown and described.

2. A light coloring attachment comprising a spring wire clamping member adapted to clamp
45 resiliently around an electric light bulb and having a threaded portion secured thereto and extending therefrom, a plurality of threaded couplings adapted to be threaded together and forming a continuous shaft one end of which is adapted
50 to thread onto the extended portion of said wire clamping member, a knob member adapted to thread onto one end of said shaft, a colored translucent cover adapted to be clamped between one of the threaded couplings and the knob member, said colored translucent cover being adapted
55 to contact resiliently against the outwardly disposed edge of a light reflector, all substantially as shown and described.

RAYMOND E. JONES.
DWIGHT A. ELLIOTT.